

**Abstract**

The present invention relates to a novel nickel catalyst. The present invention also relates to a process for the preparation of an improved nickel catalyst. The present invention also relates to a process for hydrogenation of m-dinitro benzene to m-phenylene diamine using the said improved catalyst. More particularly the present invention relates to a process involving hydrogenation of m-dinitrobenzene to m phenylene diamine in the presence of a supported bimetallic platinum catalyst, using methanol as a solvent. The catalyst system consisting of one metal selected from platinum group and other nickel supported on either carbon or alumina or silica or zeolite. The catalyst of the present invention is a bimetallic catalyst prepared by precipitation and impregnation technique at very specific preparation conditions.